

Single 5-1/4" x 14" VERSA-LAM® 2.0 3100 DF

PASSED

B1-21 (GL 1-2) (Floor Beam)

Dry | 1 span | No cant.

June 11, 2020 07:26:05

BC CALC® Member Report

Build 7555

Job name: Kelkari Townhomes Bldg. 1

File name:

Address:

Description:

City, State, Zip:

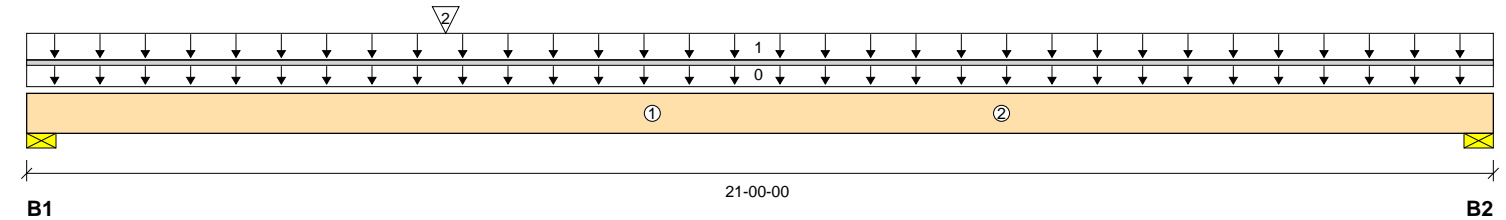
Specifier:

Customer: Intracorp

Designer: Brent Simmons

Code reports: ESR-1040

Company: Boise Cascade



Total Horizontal Product Length = 21'-00"

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 5"	2697 / 0	874 / 0			
B2, 3-1/2"	1543 / 0	583 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	Tributary
							100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	21-00-00	Top		19				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	21-00-00	Top	40	10				02-00-00
2	GL5-16 Point Load from Bearing Hanger	Conc. Pt. (lbs)	L	06-00-00	06-00-00	Back	2560	640				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	18028 ft-lbs	41.4%	100%	1	06-00-00
End Shear	3383 lbs	24.2%	100%	1	01-07-00
Total Load Deflection	L/490 (0.5")	49.0%	n/a	1	09-09-11
Live Load Deflection	L/652 (0.376")	55.2%	n/a	2	09-09-11
Max Defl.	0.5"	50.0%	n/a	1	09-09-11
Span / Depth	17.5				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01 1" Hole	08-11-08	7"	L	1"		Circular	Horizontal
- Prescriptive							
H02 1" Hole	13-11-08	7"	L	1"		Circular	Horizontal
- Prescriptive							

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 5" x 5-1/4"	3571 lbs	21.8%	18.1%	Douglas Fir
B2	Wall/Plate 3-1/2" x 5-1/4"	2126 lbs	18.5%	15.4%	Douglas Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets arbitrary (1") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2009.
 Design based on Dry Service Condition.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Single 5-1/4" x 14" VERSA-LAM® 2.0 3100 DF

PASSED

B1-20 (GL 2-3) (Floor Beam)

Dry | 1 span | No cant.

June 11, 2020 07:33:06

BC CALC® Member Report

Build 7555

Job name: Kelkari Townhomes Bldg. 1

File name:

Address:

Description:

City, State, Zip:

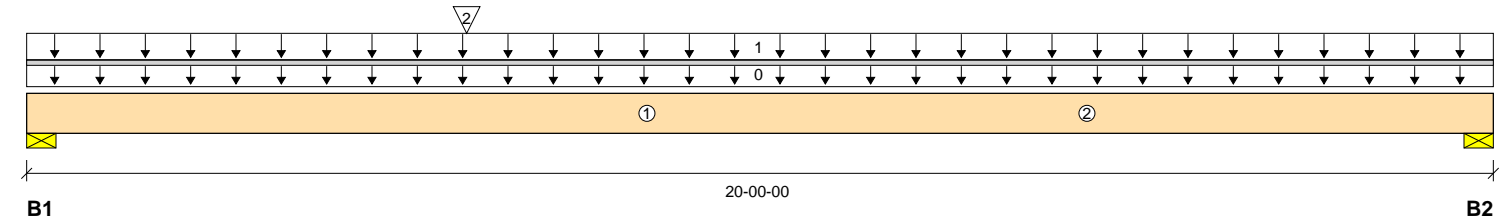
Specifier:

Customer: Intracorp

Designer: Brent Simmons

Code reports: ESR-1040

Company: Boise Cascade



Total Horizontal Product Length = 20-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	2604 / 0	840 / 0			
B2, 3-1/2"	1556 / 0	578 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	Tributary
							100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	20-00-00	Top		19				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	20-00-00	Top	40	10				02-00-00
2	GL5-16 Point Load from Bearing Hanger	Conc. Pt. (lbs)	L	06-00-00	06-00-00	Back	2560	640				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	17737 ft-lbs	40.7%	100%	1	06-00-00
End Shear	3270 lbs	23.4%	100%	1	01-05-08
Total Load Deflection	L/527 (0.445")	45.6%	n/a	1	09-04-00
Live Load Deflection	L/699 (0.336")	51.5%	n/a	2	09-04-00
Max Defl.	0.445"	44.5%	n/a	1	09-04-00
Span / Depth	16.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01 1" Hole	08-05-08	7"	L	1"		Circular	Horizontal
- Prescriptive							
H02 1" Hole	14-05-08	7"	L	1"		Circular	Horizontal
- Prescriptive							

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	3444 lbs	30.0%	25.0%	Douglas Fir
B2	Wall/Plate 3-1/2" x 5-1/4"	2134 lbs	18.6%	15.5%	Douglas Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets arbitrary (1") Maximum Total load deflection criteria.
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Single 5-1/4" x 14" VERSA-LAM® 2.0 3100 DF

PASSED

B1-20 (GL 3-4) (Floor Beam)

Dry | 1 span | No cant.

June 11, 2020 07:35:32

BC CALC® Member Report

Build 7555

Job name: Kelkari Townhomes Bldg. 1

File name:

Address:

Description:

City, State, Zip:

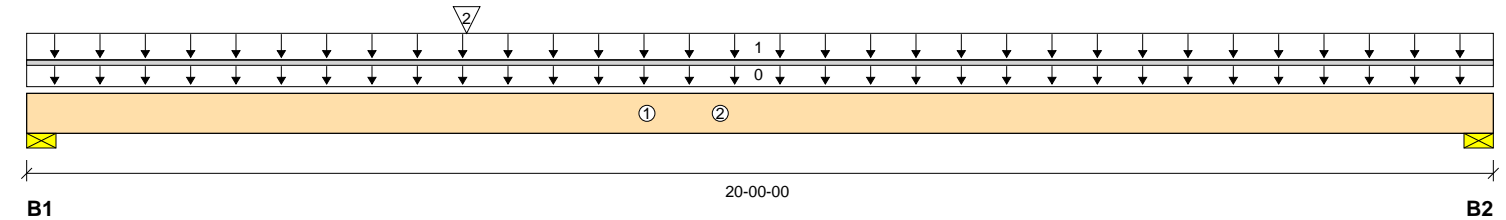
Specifier:

Customer: Intracorp

Designer: Brent Simmons

Code reports: ESR-1040

Company: Boise Cascade



Total Horizontal Product Length = 20-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	2604 / 0	840 / 0			
B2, 3-1/2"	1556 / 0	578 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	Tributary
							100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	20-00-00	Top		19				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	20-00-00	Top	40	10				02-00-00
2	GL5-16 Point Load from Bearing Hanger	Conc. Pt. (lbs)	L	06-00-00	06-00-00	Back	2560	640				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	17737 ft-lbs	40.7%	100%	1	06-00-00
End Shear	3270 lbs	23.4%	100%	1	01-05-08
Total Load Deflection	L/527 (0.445")	45.6%	n/a	1	09-04-00
Live Load Deflection	L/699 (0.336")	51.5%	n/a	2	09-04-00
Max Defl.	0.445"	44.5%	n/a	1	09-04-00
Span / Depth	16.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01 1" Hole	08-05-08	7"	L	1"		Circular	Horizontal
- Prescriptive							
H02 1" Hole	09-05-08	7"	L	1"		Circular	Horizontal
- Prescriptive							

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	3444 lbs	30.0%	25.0%	Douglas Fir
B2	Wall/Plate 3-1/2" x 5-1/4"	2134 lbs	18.6%	15.5%	Douglas Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
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Single 5-1/4" x 14" VERSA-LAM® 2.0 3100 DF

PASSED

B1-21 (GL 4-5) (Floor Beam)

Dry | 1 span | No cant.

June 11, 2020 07:40:26

BC CALC® Member Report

Build 7555

Job name: Kelkari Townhomes Bldg. 1

File name:

Address:

Description:

City, State, Zip:

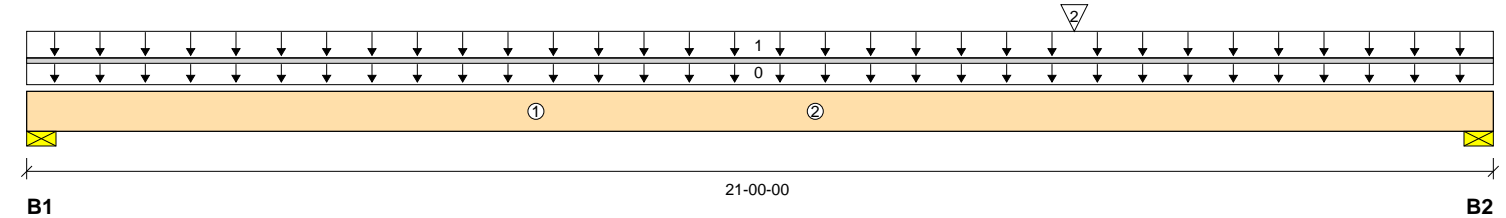
Specifier:

Customer: Intracorp

Designer: Brent Simmons

Code reports: ESR-1040

Company: Boise Cascade



Total Horizontal Product Length = 21'-00"

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	1538 / 0	581 / 0			
B2, 5-1/2"	2702 / 0	875 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	Tributary
							100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	21-00-00	Top		19				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	21-00-00	Top	40	10				02-00-00
2	GL5-16 Point Load from Bearing Hanger	Conc. Pt. (lbs)	R	06-00-00	06-00-00	Back	2560	640				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	17922 ft-lbs	41.2%	100%	1	15-00-00
End Shear	3385 lbs	24.2%	100%	1	19-04-08
Total Load Deflection	L/493 (0.496")	48.7%	n/a	1	11-02-05
Live Load Deflection	L/657 (0.372")	54.8%	n/a	2	11-02-05
Max Defl.	0.496"	49.6%	n/a	1	11-02-05
Span / Depth	17.5				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01 1" Hole	07-03-08	7"	L	1"		Circular	Horizontal
- Prescriptive							
H02 1" Hole	11-03-08	7"	L	1"		Circular	Horizontal
- Prescriptive							

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	2119 lbs	18.4%	15.4%	Douglas Fir
B2	Wall/Plate 5-1/2" x 5-1/4"	3578 lbs	19.8%	16.5%	Douglas Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
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